

## **Checklist - Individual development for scientific staff**

*Try to answer the questions by yourself first and then select a few aspects to discuss with your supervisor.*

### **Current status**

- What have you achieved in the last year?
- How content are you with your work, workplace, colleagues and supervisor?
- What needs to be improved?
- Are there any specific problems?
- How can these problems be solved?

### **What are my interests & goals?**

- What is my main research area of interest?
- On which specific research question do I want to work?
- Which degrees do I want to obtain and until when?
- How long do I want to work in my current position and for my current employer?
- In what position and for which kind of employer (industry/academia) do I want to work in the future (2y, 5y, 15y)?
- What qualifications and skills are important to achieve these goals?

### **1. Personal qualifications**

- Which of my personal strengths help me in my work?
- Which of my personal weaknesses affect my work?
- How can I improve my personal qualifications?

### **2. Study design**

- How good am I at identifying research topics with a wide impact?
- How good am I at designing studies and setting realistic research goals?
- How can I improve my ability to design studies?

### **3. Scientific knowledge & skills**

#### **3.1. Scientific reading**

- How good am I at keeping up with the current literature? How many articles do I read per month?
- How many articles do I need/want to read per month?
- How good am I at remembering what I have read?
- How good am I at organizing the articles that I have read so I can find them again?
- How can I improve my reading habits?

#### **3.2. Attendance of courses, seminars and conferences**

- How well-informed am I about current courses, seminars and conferences?
- How often do I attend courses, seminars and conferences?
- Which of the courses, seminars and conferences did I benefit most from and why?

- Which courses, seminars and conferences do I want to attend in the future and how often?
- How good am I at remembering what I have heard?
- How can I benefit more from courses, seminars and conferences?

### **3.3. Knowledge of specific research field**

- How familiar am I with the specific topics that are relevant for my project?
- What do I need/want to know more about?

### **3.4. Background knowledge**

- With which areas outside my specific project am I familiar?
- What do I need/want to know more about?

### **3.5. Technical knowledge**

- Which techniques do I understand (theoretical knowledge)?
- Which techniques can I use (practical knowledge)?
- How good am I at using online resources (Pubmed & other NIH databases, Expasy, Oncomine, protein-protein-interaction databases, array/sequencing data repositories....)
- What do I need/want to know more about?

### **3.6. Computer skills**

- How good am I at using important software (Excel, Word, Powerpoint, ImageJ, Illustrator, Photoshop, EndNote, specific scientific software)?
- How good are my general computer skills?
- What do I need/want to know more about?

### **3.7. Experimental planning & execution**

- How good am I at deciding which experiments I need to do to answer a research question?
- How good am I at designing my experiments?
- How can I improve my experimental planning?
- How good am I at conducting my experiments (how often do I make mistakes)?
- How can I improve my experimental performance?

### **3.8. Method development**

- Which methods have I developed?
- Which methods do I need/want to develop?

### **3.9. Safety & ethics**

- How familiar am I with safety regulations (general laboratory safety, fire safety, chemical toxicity, P2 regulations, etc.) & first-aid?
- How familiar am I with ethical guidelines (animal/clinical work, research conduct, authorship, confidentiality, conflict of interest, handling of misconduct, etc.)?
- Do I always follow the regulations?
- How can I improve my knowledge about safety and ethical guidelines?

## **4. Publishing**

### **4.1. Number & quality of publications**

- How many publications do I have? Which journals have I published in?
- What is the quality of my publications?
- How many articles do I want to publish in the next 2 years and on which topics?
  - original papers
  - reviews
- In which journals would I like to publish in?
- How can I achieve these publication goals and improve the quality of my publications?

### **4.2. Impact & recognition**

- Are other people in my field aware of my work and is the importance of my work recognized?
- How many times has my work been cited?
- How often am I invited to present my work (seminars, courses, conferences)?
- How can I make others more aware of my work and increase the number of citations & invitations?
- How can I increase my chances of being selected for a conference talk?

### **4.3. Success rate of submission**

- How realistic am I when selecting a journal for submission (success rate)?
- How can I improve the success rate of my submissions?

## **5. Funding acquisition & interviews**

### **5.1. Funding acquisition**

- What funding have I obtained so far?
- Which scores did I receive and which comments did I get (especially when my grant was declined)?
- Which funding do I want to obtain in the next two years?
- How good am I at identifying agencies which will give me a grant (success rate)?
- How can I improve my success rate?

### **5.2. Application/grant writing**

- How good am I at writing applications/grants (CV, project description, abstract)?
- How can I improve my application/grant writing skills?

### **5.3. Interview skills**

- How good am I at being interviewed for a grant/position?
- How can I improve my interview skills?

## **6. Teaching & supervision**

### **6.1. Recruitment**

- How good am I at enticing good candidates to apply for my project?
- How can I improve my recruitment habits?

- How good am I at interviewing candidates and selecting the right candidate?
- How can I improve my interviewing skills?

## **6.2. Supervision**

- What supervising experience do I have?
- How good am I at supervising others?
- How can I improve my supervision skills?

## **6.3. Lecturing & course organization**

- What experience in lecturing/course organization do I have?
- Which topics can I lecture/organize a course about?
- How much do I want to be involved in lecturing/course organization in the future?
- How good am I at lecturing/course organization?
- How can I improve?

## **6.4. Pedagogic training**

- What kind of formal pedagogic training do I need to obtain the next position I aim for? Do I fulfill these criteria?
- How can I obtain the required training?

# **7. Leadership**

## **7.1. Leadership**

- Do I trust myself to take the responsibility for a group? Do I enjoy leading a group?
- What leadership experience do I have?
- How can I improve my leadership skills and confidence?

## **7.2. Independence**

- In which areas have I demonstrated independence from my former and current supervisor (personal funding, independent research project, senior author publications)?
- How can I become more independent?

## **7.3. Prioritizing & delegating**

- How good am I at prioritizing & delegating?
- Which of my current tasks do I want/need to prioritize?
- Which of my current tasks do I want/need to delegate?
- How can I improve?

## **7.4. Conflict management & criticism**

- How good am I at identifying and managing conflicts between myself and other people?
- How good am I at identifying and managing conflicts between other people?
- How can I improve my conflict management?
- How good am I at receiving criticism and advice?
- How good am I at giving criticism and advice?
- How can I improve my habits regarding criticism?

## **8. Networking & collaborations**

### **8.1. General collaborative skills**

- How good am I as a teamworker and collaborator?
- How good am I at finding collaborators?
- How good am I at being found by collaborators?
- How can I improve my collaborative skills?

### **8.2. Intra-group collaboration/teamwork**

- Whom have I collaborated with so far?
- How successful was the collaboration?
- Whom do I want to collaborate with in the future?
- How can I ensure the success of future collaborations?

### **8.3. Collaborations outside laboratory**

- Whom have I collaborated with so far?
- How successful was the collaboration?
- Whom do I want to collaborate with in the future?
- How can I ensure the success of future collaborations?

### **8.4. Networking**

- How comfortable and good am I at networking?
- How good am I at meeting new people and introducing myself?
- How good am I at keeping in contact with people I meet (e.g. at a course/conference)?
- Whom would I consider to be part of my network?
- What have I done to support the people in my network?
- How comfortable am I with asking people in my network for support?
- How can I improve my network and networking skills?

### **8.5. Mentors**

- Who is/could be a mentor for me?
- How good is the contact with my mentors?
- How can I find new mentors and improve my contact with them?

### **8.6. Future employers**

- Am I interested in starting a company?
- Which employment possibilities/types am I aware of?
- Which specific employers may I want to work for in the future?
- How good is my contact to these employers?
- How can I inform myself about these employers and improve my contact with them?

## **9. Industry contacts, patenting & clinical applications**

- How many patents do I have? Am I aware of patenting procedures?
- Could any of my findings be patented?

- Do I have any specific findings that can be translated into clinical applications/drug development?
- Do I have any contacts to the industry/clinic?
- How can I improve my contacts to the industry/clinic and translate my findings into clinical applications/drug development?

## **10. Administrative skills & project management**

### **10.1. Project management**

- What experiences in project management do I have (research project, other project)?
- How good am I at designing and managing a project?
- How can I improve my project management skills?

### **10.2. Budgeting**

- How much does my current research and that of my group cost?
- Am I aware of the cost of different reagents and experiments?
- How can I improve my knowledge of financial matters?
- Do I have any ideas that could save money in the lab?

### **10.3. Time management**

- How good am I at time management (do I keep deadlines, can I estimate the time required for a specific task)?
- How can I improve my time management?

### **10.4. Lab book & summary writing**

- How good am I at keeping my lab book and summarizing my progress (mini meetings)?
- How can I improve?

## **11. Academic activities**

### **11.1. Critical evaluation of scientific work**

- How good am I at critical thinking?
- How good am I at critically evaluating scientific work (my own and that of others)?
- How can I improve?

### **11.2. Reviewing**

- How many articles/grants have I reviewed?
- How many articles/grants do I want to review in the future?
- How good am I at reviewing?
- How can I become involved in reviewing articles/grants?
- How can I improve my reviewing skills?

### **11.3. Conference/seminar organization**

- What experience do I have in organizing conferences/seminars?
- What kind of conference/seminar do I want to organize in the future?
- How good am I at organizing conferences/seminars?

- How can I improve?

#### **11.4. Other activities (board membership, etc.)**

- Which other academic activities have I been involved in?
- Which other academic activities do I want to be involved in and how can I achieve this?

## **12. Communication & presentation skills**

### **12.1. General communication skills**

- How good am I at listening?
- How good am I at expressing myself?
- How can I improve my general communication skills?

### **12.2. English/Danish language proficiency**

- How good am I in English/Danish in writing and speech?
- How can I improve my language skills?

### **12.3. Writing skills**

- How good am I at scientific writing (original articles, theses, reviews)?
- How can I improve my writing skills?

### **12.4. Poster/figure design**

- How good am I at designing posters and article figures?
- How can I improve my design skills?

### **12.5. Presentation technique & discussion skills**

- How good am I at holding presentations?
- How good am I at answering questions about my research (after talks and in informal settings)?
- How good am I at discussing scientific findings?
- How can I improve my presentation and discussion skills?

### **12.6. Communication with non-scientists**

- How good am I at writing for/talking to non-scientists about my work?
- How good am I at communicating important findings to the general public?
- How good am I at communicating with the media?
- How can I improve my communication with non-scientists and the media?

## **13. Internationality & mobility**

- How many different institutions/employers have I worked for?
- Which countries have I lived and worked in (even shorter stays)?
- Which languages besides English and my mother tongue do I speak?
- Do I have any international collaborations?
- Which country/city would I like to work in in the future?
- How can I improve my internationality/mobility?

#### **14. Work-life balance**

- Am I overwhelmed with my work and do I neglect my health over work?
- How many hours per week do I work and how many vacation days (without taking work) do I take?
- Do I have enough time for myself, my family and my friends?
- How can I improve my work-life balance and relieve stress?