June 19, 2017

To: Dylan Rodriguez, Chair

Academic Senate

From: Ameae M. Walker Amore Dallo.

Vice Provost for Academic Personnel

Re: Request for 100% FTE Transfers for –

Professor Anandasankar Ray and Professor Anupama Dahanukar

Enclosed is the request and documentation for the 100% FTE transfer from the Department of Entomology to the Department of Cell Biology & Neuroscience within the College of Natural & Agricultural Sciences effective July 1, 2017.

Per the campus FTE Transfer procedures, I am submitting this request to the Senate for its recommendation.

Enclosure



College of Natural and Agricultural Sciences Agricultural Experiment Station and Cooperative Extension Office of the Dean – 2258C Geology Building Riverside, CA 92521-0127

June 7, 2017

TO:

Ameae Walker, Vice Provost for Academic Personnel

FROM:

Kathryn E. Uhrich, Dean, CNAS

RE:

FTE Transfer for Drs. Ray and Dahanukar

I am in receipt of requests from Drs. Anandasankar Ray and Anupama Dahanukar (requests attached) to transfer their FTE (40% IR and 60% OR) from the Department of Entomology to the Department of Cell Biology and Neuroscience. Both departments have convened a faculty vote with positive outcomes. I am supportive of these transfers, and believe their research expertise and teaching will be an enhancement to the department.

The effective date of these transfers are July 1, 2017.

Please let me know if you require further information to evaluate these requests.

#### Attachments

Cc:

Rick Redak, Entomology David Eastmond, CBNS Jennifer Farias, CNAS Beverly McNeil, CBNS Kathy Carrington, Entomology Laurie Bollinger, CNAS



DEPARTMENT OF CELL BIOLOGY & NEUROSCIENCE RIVERSIDE, CALIFORNIA 92521 USA VOICE: (951) 827-4497

DICE: (951) 827-4497 FAX: (951) 827-3087

May 24, 2017

To: Ameae Walker, Vice Provost for Academic Affairs

Via: Kathryn Uhrich, Dean, CNAS

From: David A Eastmond, Chair, Department of Cell Biology & Neuroscience

RE: FTE Transfer for Drs. Anandasankar Ray and Anupama Dahanukar

Encl: Memo from Department of Entomology, FTE Transfer Requests from Drs. Ray and Dahanukar, and FTE Transfer Procedures

The Department of Cell Biology & Neuroscience has received requests from Drs. Ray and Dahanukar to transfer their faculty FTE from the Department of Entomology to the Department of Cell Biology & Neuroscience. The Department also received a memo from Rick Redak, Chair, Department of Entomology, summarizing the impact that the FTE transfer would have on his department and the outcome of the faculty vote, which was strongly supportive of the FTE transfer.

On May 15, the faculty of the Department of Cell Biology & Neuroscience met to review the proposed FTE transfer, discussed its implications for the department, and voted on the proposals. The faculty voted unanimously in favor of the FTE transfer with a vote of 19 in favor, 0 opposed and 2 unavailable. The CBNS faculty members see Drs. Ray and Dahanukar as excellent scholars whose research expertise in neurobiology and sensory systems fits nicely within the department, and will complement work currently being performed as well as that anticipated as the department expands its disciplinary focus to more fully encompass research in the areas of molecular, cell and systems biology. The faculty see Drs. Ray and Dahanukar contributing significantly to the research and teaching mission of the department. As indicated in their proposed transfer memos, Drs. Ray and Dahanukar already teach classes related to cell biology and neuroscience including CBNS 108, and we believe that their transfer into our department will allow the department to increase its offerings of classes in these and related areas.

The discussion and vote was based on an understanding that oversight of the space currently occupied by Drs. Ray and Dahanukar in the Genomics Building will be transferred to the Department of Cell Biology & Neuroscience to allow Drs. Ray and Dahanukar to continue their research without interruption. In addition, it is expected that departmental resources including I&R, OR, grant and administrative support that currently support the Ray and Dahanukar appointments in Entomology will be transferred to the Department of Cell Biology & Neuroscience to allow it to support their appointments within the new host department. It should also be noted that 5 of the current CBNS faculty have split I&R:OR appointments so that continuing Drs. Ray and Dahanukar's current or adjusted split appointments should not pose a challenge, and should necessitate only minor administrative adjustments.

If you have additional questions about the CBNS perspective on the FTE transfer, feel free to contact me by email at <a href="mailto:david.eastmond@ucr.edu">david.eastmond@ucr.edu</a> or by phone at (951) 827-4497.



# Department of Entomology – 041 College of Natural and Agricultural Sciences

April 26, 2017

To: Ameae Walker, Vice Provost for Academic Affairs

Through: Kathryn Uhrich, Dean, CNAS

Through: David Eastmond, Chair, Cell Biology & Neuroscience

From: Rick Redak, Chair, Entomological Control

Subj: FTE transfer for Drs. Anandasankar Ray and Anupama Dahanukar

Encl: FTE Transfer Requests from Drs. Ray and Dahanukar, FTE Transfer Procedures

The Department of Entomology has received requests from Dr. Anandasankar Ray and Dr. Anupama Dahanukar for FTE transfers from the Department of Entomology to the Department of Cell Biology and Neuroscience. Both requests are attached. The faculty of the Department of Entomology met on April 14, 207 to discuss the various ramifications of this request and to vote on a recommendation for the transfer.

As stated in the request letters, the reasons provided for transfer for both individuals lie in the nature of their developing research. Both professors cite a movement away from mission oriented Agricultural Experiment Station (AES) focused research. Dr. Ray now indicates his research has moved into basic human neuroscience, human physiology, human neurogenerative diseases and the impact of volatiles on human lungs. Dr. Dahanukar indicates her research area has moved to a very basic level investigating "molecular, cellular, and circuit mechanisms that account for sensory coding and behavior". Her research is apparently now restricted to using *Drosophila melanogaster* as a model system to understand basic neurosensory processes. She indicates her research has moved away from AES mission oriented research.

## Impact on Departmental Research Profile

Given the nature of the requests, the impact on the research capabilities of the Department and the College are significantly impacted. This is especially a considerable loss to the Department. Originally, Dr. Ray was hired as a molecular biologist with applied interests in the molecular biology behind olfaction ("smell") with the intent that such molecular insights could be used to control and manage pestiferous insects. Similarly, the following year or so, Dr. Dahanukar was hired as a pre-emptive spousal accommodation with expertise in molecular biology of gustation ("taste") with the same expectation towards applied AES research. Given the stated current and future directions of their research, neither individual is interested in conducting what the Department still considers vital, cutting edge molecular and genetic research aimed at disrupting the main sensory systems of insects as a means of potential control.

## Impact on Department Teaching Contributions

There will some impact on the Department teaching contribution, mostly from the loss of Dr. Dahanukar. Dr. Dahanukar, until taking sabbatical this year, was assigned to teach a significant portion of the first quarter of the Entomology Graduate Core. It will be a challenge to find a replacement that did such a wonderful job with this course. Dr. Ray did not participate in the Entomology teaching mission. The majority of both individuals teaching efforts were directed towards courses outside of the Entomology Department. We assume both individuals will be available to serve on dissertation committees.

## Impact on Departmental Service

Dr. Dahanukar has actively served on standing Departmental committees and search committees. Dr. Ray's service contribution to the Department has been minimal in the last several years. The Department will adjust the loss of service contributions by these individuals.

#### Recommendations

Given the level of support (moral, financial, infrastructural) provided to Drs. Ray and Dahanukar over the years, the Department is deeply disappointed by this request; however, we do understand the faculty are entirely free to choose their own research areas for investigation. Furthermore, given the reasons provided for the transfer, the faculty members of the Department consider the move likely justified for the reasons provided and do not choose to block the transfer. In the case of Dr. Ray, the voting faculty of the Department of Entomology were unanimous in agreeing to the transfer of FTE (24 in favor, 0 opposed, 3 abstain, 2 unavailable). In the case of Dr. Dahanukar, the voting faculty of the Department were nearly unanimous in agreeing to the transfer of FTE (23 in favor, 1 opposed, 3 abstain, 2 unavailable). The one member voting against the transfer was simply voicing concern against losing a good colleague in the Department. To rectify the loss of research expertise, upon conversations with Chair Redak, Dean Uhrich has indicated that a future position(s) focused upon the molecular mechanisms of olfaction/gustation as it may be applied to controlling or managing insects likely will be favorably considered such that this level of expertise and research interest is not lost to the Department or to the College. Additionally, upon further conversations with Chair Redak, both Dean Uhrich and Divisional Dean Anderson have agreed in principal to adjust Drs. Ray and Dahunakar's IR/OR split such that it is in more accord to their current research interests.

Chair,

I am requesting to transfer my FTE from Entomology to the Cell Biology and Neuroscience department. This statement is prepared according to Procedures listed at <a href="http://academicpersonnel.ucr.edu/appointment/ftetransfer.html">http://academicpersonnel.ucr.edu/appointment/ftetransfer.html</a>.

#### Proposed duties and activities:

- 1. I am an Associate Professor Step 4 with 60% OR and 40% IR appointment. My current duties include:
- 2. Research (main lab space in the Genomics building),
- 3. Teaching (last year I taught 50% of Bio 5A Introduction to Cell & Molecular Biology, 50% of CMDB202 core, and 50% of CBNS 108).
- 4. I have 4 graduate students: 2 from Neuroscience Program and 2 from CMDB program.
- 5. Service (Campus wide search committee for Mosquito cluster, Executive committee for CIDVR, Website committee of Entomology).

With transfer of my FTE to CBNS I anticipate that most of my responsibilities would not change. The only change anticipated would be the Website committee.

## Reasons for the transfer request

I am requesting transfer of my FTE because the Department of Cell Biology and Neuroscience is more aligned with my research interests & acheivments, teaching interests, capabilities and expertise and achievements, as well as my future teaching interests.

## A. Research interests

I feel that my current and future interests are less appropriate for an applied phyla-based Department like Entomology and better suited for the basic science department like Cell Biology and Neuroscience Department.

My laboratory uses the olfactory system as a model to understand 5 basic neuroscience questions: how odorants are detected by receptors in the nervous system, how neurons fire to generate behaviors, how neurons are specified to express genes during development, how neurons acquire memories through plasticity, and how neuronal function degenerates in old age or disease conditions. Over the past 2 years my research interests have also moved substantially towards understanding epigenetic gene expression and neurodegenerative diseases. Towards this end I have moved increasingly to include vertebrate systems and done several experiments with mice and mammalian cell lines. The mammal-based projects have moved far enough that we have submitted grants to NIH and are revising a manuscript for resubmission soon.

Another major emerging theme of my research is how volatile odorants may be altering expression of genes and causing a potential physiological change in the lungs. We have evaluated this with genomics in the fly eye, and mouse lungs and are pursuing a potential paper and an NIH grant in collaboration with a lab in the medical school. I am also in discussions to investigate the effect of these drug-like odorants in immune response in a lung

infection as well as an appropriate form of cancer (like Lung cancer) with a colleague in another university.

My interest in neurobiology of behavior has also shifted more to basic research questions such as trying to use statistical modeling or computational biology to predict odor perception in a species. In *Drosophila melanogaster* this has led to exciting new insight into how activity of an ensemble of neurons can generate a type of behavior. And, we have extended our findings with this methodology to human olfaction now where we have been able to quantify and predict perception of an odor from chemical structure alone.

In the area of neurodevelopment and circuits we have gained valuable insight and used computational tools to screen for novel relationships between transcription factor binding sites, gene expression, and epigenetic gene regulation. Again, these topics are mostly on understanding basic principles of neurodevelopment and we are simply using *Drosophila* as a model genetic system.

In the field of learning and memory, we just published a paper describing the role chromatin modifying enzymes and in plasticity of the synapse and long-term memory formation. Also, we have used high-throughput sequencing to identify activity-modulated genes in neurons that may participate in memory formation. Mutant analysis has led us to identify genes conserved in humans that may play a role in the mysterious phenomenon of memory.

In areas related to insect olfaction, many of the questions we are addressing now are related to visualizing neuronal circuits that generate behavior and imaging activities of ensembles of neurons to answer fundamental questions about how attractive or aversive valence is generated in a sensory system.

Most of these projects above are poorly aligned to that mission and environment of an Entomology Department and I have faced challenges with grant review committees (related to "Environment"), and recruitment of postdocs and personnel. I feel these will be greatly improved at CBNS, as will appreciation of these projects in my Merit & Promotion files.

Several of our projects have led to new generations of insect repellents and a attractants which I can continue to pursue as usual in CBNS as part of the OR mission.

#### B. Teaching interests

In the past I have been interested in teaching courses on 2 topics: i/ molecular biology courses (BIO5A, BIO108A), and ii/ developmental biology courses (CBNS 108, CMDB202). In the near future I have planned to develop an upper division course on Molecular Sensory Neuroscience. This teaching profile matches my academic training and is better aligned to CBNS.

## C. Capabilities and Expertise.

My capabilities and expertise stems from my academic training and my research program. Unfortunately I have not had the opportunity to take formal training in the field of Entomology, however I have self-learned about insect species that we investigate nervous system function and behavior for such as various mosquitoes and flies. I have a Masters in Biotechnology, which dealt with modern molecular biology. My PHD is in Cell, Molecular and Developmental Biology. My research program is primarily in Molecular Neurobiology since my PhD days. These are better suited for CBNS.

Qualifications for membership in the proposed host department

My training, expertise, teaching interests, and research interests are well aligned with the Cell Biology and Neuroscience Department. Additionally, my primary publications are primarily in Neuroscience journals (Neuron, Molecular Cellular Neuroscience, Chemical Senses) or general interest journals (Nature, Cell, Science, Cell Reports, eLife, etc). My authoritative reviews are mainly in Neuroscience journals (Current Opinion in Neurobiology, Molecular and Cellular Neuroscience). My current NIH grant is from National Institute of Deafness and other Communication Disorders. In the past I have had 2 NIH grants from National Institute of Neurological Disorder and Stroke and from a prestigious private foundation Whitehall Foundation that funds neuroscience research. I collaborate actively with members of CBNS and have written grants with Mike Adams, Sachiko Yamanaka and Karine LeRoch, all of which will be revised and resubmitted in March (an RO1 and two R21s).

I was also one of the key authors of the successful Neuroscience Cluster most members of which are housed in CBNS. Additionally I was a key author of a Mosquito cluster, of which CBNS has expressed openness to house a future hire. I am particularly excited about joining the growing number of mechanistic neuroscience faculty working in CBNS. I am positive that I can make a major contribution to enhancing the profile of neuroscience at UCR through grants, papers, mentoring of junior faculty and students, and teaching.

On Feb 6, 2017, at 3:23 PM, Anandasankar Ray <anand.ray@ucr.edu> wrote:

Dear Kathryn,

Anupama and I will be initiating a request to transfer our FTEs from Entomology to CBNS according to the Procedures listed at the Academic Personnel website (http://academicpersonnel.ucr.edu/appointment/ftetransfer.html).

We are preparing a 2-page document for each person according to the procedures listed which details the purpose of the transfer reflecting on the individual's research interests and achievements, and/or to reflect the individual's teaching interests, capabilities and expertise. Alongside, we will also send a CV with current and pending papers and grants. We will send these to you, and the Chairs, by the end of this week. I was writing to find out whether there are additional documents you may want to see as well, such as evidence of research effort in a non-entomology field? If you let us know we can include that in the package.

Apart from the academic and research factors that led to this decision, we would also like to meet with you to discuss other factors that influence productivity and satisfaction in our current home department. It would be great if we had time to discuss this with you some point in the future.

With best regards, Anand March 31, 2017

Dear Chair Redak,

I am writing to request an FTE transfer from the Department of Entomology to the Department of Cell Biology and Neuroscience. This statement is prepared according to Procedures listed at <a href="http://academicpersonnel.ucr.edu/appointment/ftetransfer.html">http://academicpersonnel.ucr.edu/appointment/ftetransfer.html</a>.

#### Proposed duties and activities:

I am currently an Associate Professor Step II holding a 60% OR, 40% IR appointment. My current duties include research, teaching, and service. The transfer of my FTE from ENT to CBNS is not likely to change any of my duties and activities.

- My laboratory is housed in the Genomics Building in space that was allocated to the Center for Disease Vector Research. I plan to continue being a participating member in the Center (now CIDVR).
- My teaching assignments for 2017-2018 are BIOL 5A (50%) CMDB/GEN 203 (50%), CBNS 108 (50%). None of these will be affected by my FTE transfer.
- I have three graduate students from various interdepartmental programs, none of whom will be affected by my FTE transfer. I have one graduate student in the Entomology graduate program. I plan to seek participation as a CFM in the Department of Entomology, so I can continue to serve as her thesis mentor.
- I am currently on sabbatical and not serving on any departmental committees. Thus, none
  of my service commitments will be impacted.

#### Reasons for the transfer request:

I am requesting transfer of my FTE because the Department of Cell Biology and Neuroscience is more aligned with my research interests, expertise and achievements, as well as my future teaching interests.

#### 1. Research interests and achievements

My research interests are to investigate fundamental molecular, cellular and circuit mechanisms that underlie sensory coding and behavior using the genetic model, *Drosophila melanogaster*. Although we have been successful in uncovering basic principles of gustatory function in the fly and in applying them towards studying other insects, our ongoing projects and future interests are moving in directions that are more relevant to areas of basic molecular and cellular neuroscience. Progress in my research program would certainly benefit from my participation in the CBNS department, given its recent addition of neuroscientists.

I feel that my achievements also reflect a better alignment with the CBNS department. My grant success has derived from research questions that address molecular mechanisms of taste detection, sensory coding, and modulation of taste responses in a genetic model organism. My publications are primarily in neuroscience or inter-disciplinary journals. A majority of my graduate students (past, current and rotating) are from the Neuroscience program or other inter-disciplinary programs. Most of my undergraduate students are Biology/Neuroscience/CMDB majors and elected to sign up for research units under CMDB or CBNS.

#### 2. Teaching interests

I would like to continue teaching CBNS 108 (Developmental Biology) and CMDB/GEN 203 (Genetic Analysis of Model Organisms). My co-instructors for these courses are faculty in the Departments of CBNS (for CBNS 108) and Botany and Plant Sciences (for GEN 203). I am interested in developing new undergraduate courses that would serve Neuroscience majors. I am considering topics such as "Sensory Systems" and "Genetic Models for Human Diseases" among

others. Any such course offerings would be best developed in conjunction with the needs for the Neuroscience major.

Qualifications for membership in the proposed host department:

My scientific background in development, neurophysiology, and behavior, expertise with a genetic model system, achievements in training Neuroscience graduate and post-doctoral researchers, and teaching various Molecular Biology, Genetics, Developmental Biology courses to undergraduate students makes me well-qualified to participate in the research, teaching and service duties of the Cell Biology and Neuroscience department. I will be able to join a growing cadre of Neuroscience faculty with overlapping interests regarding the function of the nervous system, and make substantive contributions towards developing curricula for, teaching, and mentoring Neuroscience majors.

Anupama Dahanukar Associate Professor

Department of Entomology

Institute for Integrative Genome Biology

University of California

Riverside, CA 92521

(951) 827-5742